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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/733,624 | 12/08/2000 | David G. Lamphere | 1611/122 | 2412 |

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EXAMINER

SORKIN, DAVID L

| ART UNIT | PAPER NUMBER |
|----------|--------------|
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1723

6

DATE MAILED: 07/18/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/733,624

Applicant(s)

LAMPHERE ET AL.

Examiner

David L. Sorkin

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 April 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 December 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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DETAILED ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference signs not mentioned in the description: 28, 44, 55, 57 and 59. A proposed drawing correction, corrected drawings, or amendment to the specification to add the reference signs in the description, are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

2. Note: the examiner acknowledges the definition of the term "shaped diaphragm" in lines 22-26 of page 8 of the instant specification. The examiner has considers the scope of the claims to be limited in accordance with this definition.

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as being anticipated by Headley et al. (US 5,885,239). Regarding claim 1, Headley ('239) discloses a fluid processing disposable set comprising a fluid port (13/83) and a variable-volume chamber in fluid communication with the fluid port, the chamber defined by a fixed wall (40) and an elastic wall (3!), the elastic wall formed by a shaped diaphragm (see Figs. 20-23 and col. 23, line 46; col. 25, lines 46-47; and col. 27, lines 15-16). Regarding

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claim 2, a rotary seal (48) is coupled to the fluid port and the rotary seal (48) is fluidly coupled to the chamber.

5. Claims 1 and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Neu (US 4,608,164). Regarding claim 1, Neu ('164) discloses a set comprising a fluid port (55,56 or 8) and a variable volume chamber in fluid communication with the fluid port, the chamber defined by a fixed wall (1) and an elastic wall (7), the elastic wall formed by a shaped diaphragm (see Figs. 4 and 12). Regarding claim 6, the shaped diaphragm is essentially planar in an unstretched position, the diaphragm varying in thickness (see col. 5, lines 54-56).

6. Claims 1-5 are rejected under 35 U.S.C. 102(b) as being anticipated by Asmussen (US 2,179,807). Regarding claim 1, Asmussen ('807) discloses a set comprising a fluid port (15) and a variable volume chamber in fluid communication with the fluid port, the chamber defined by a fixed wall (11) and an elastic wall (9), the elastic wall formed by a shaped diaphragm (see drawing). Regarding claim 2, a rotary seal (16) is coupled to the fluid port and the rotary seal (16) is fluidly coupled to the chamber. Regarding claim 3, the shaped diaphragm is convoluted (see drawing). Regarding claim 4, the shaped diaphragm has at least one fold (see drawing). Regarding claim 5, the diaphragm has a plurality of folds, the folds located symmetrically about an axis (see drawing).

7. Claims 1, 6 and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Lord et al. (US 1,885,457). Lord ('457) discloses a set comprising a fluid port (5 or 6) and a variable volume chamber in fluid communication with the fluid port, the chamber

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defined by a fixed wall (1 and/or 2) and an elastic wall (7), the elastic wall formed by a shaped diaphragm (see Figs. 1 and 2). Regarding claim 6, the shaped diaphragm is essentially planar in an unstreched position, the diaphragm varying in thickness (see Figs. 1 and 2; page 1, lines 47-53). Regarding claim 7, the thickness is constant at locations equidistant from an axis (see Figs. 1 and 2; page 1, lines 47-53).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David L. Sorkin whose telephone number is 703-308-1121. The examiner can normally be reached on 8:00 -5:30 Mon.-Fri..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda L. Walker can be reached on 703-308-0457. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.



David Sorkin

July 5, 2002



CHARLES E. COOLEY
PRIMARY EXAMINER